

Notice of Allowability

Application No.

10/622,912

Applicant(s)

LI, CHI-LUNG

Examiner

Blaise L Mouttet

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the communication of October 19, 2004.
2. ☒ The allowed claim(s) is/are 1-17.
3. ☒ The drawings filed on 15 July 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Preliminary Amendment

The preliminary amendment of October 15, 2004 is acknowledged.

PRIOR ART OF RECORD

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kortegaard US 4,827,257 discloses an ID circuit employing a counter. However the ID circuit is not configured to provide an identification code representing a type of ink jet print head and does not include a programming unit coupled to output terminals of the counter and input terminals of a logic unit or plurality of switches as claimed.

Kikuchi et al. US 4,930,915 provides an ID circuit on a printhead made from open or closed connection lines. A counter is not taught to be part of the ID circuit.

Barbehenn et al. US 5,363,134 (discussed in applicant's specification) provides an ID circuit on an inkjet printhead which employs programmable fuses and the address lines used in printing in the identification. A counter is not taught to be part of the ID circuit.

Watrobski et al. US 5,504,507 provides a serial input/output shift register on an inkjet printhead to facilitate the programming and reading of ID information on the printhead. The shift register is not taught to be configured as a counter or used in combination with a programming unit and logic unit/switches to produce the identification code as claimed.

Gibson et al. US 5,757,394 teaches utilizing pull-up/pull-down circuitry to facilitate inkjet printhead type identification. A counter is not taught to be part of the ID circuit.

Parish et al. US 5,940,095 (discussed in applicant's specification) discloses mask programmed one bit serial output shift registers used in inkjet printhead type identification. The shift registers are not taught to be configured as a counter or used in combination with a logic unit/switches to produce the identification code as claimed.

Gibson et al. US 6,022,094 employs memory matrix elements in combination with shift registers to improve the number of bits to be stored in an inkjet printhead ID. The shift registers are not taught to be configured as a counter or used in combination with a logic unit/switches to produce the identification code as claimed.

Harbour et al. US 6,325,483 discloses utilizing parallel paths for programmed transistors in an inkjet printhead ID circuit to increase the amount of information that is storable. A counter is not taught to be part of the ID circuit.

Hu et al. US 6,568,783 discloses utilizing the power supply lines in an inkjet printhead ID circuit. A counter is not taught to be part of the ID circuit.

Edelen et al. US 6,568,785 discloses utilizing shift register and latching circuitry in an inkjet printhead ID circuit. The shift register is not taught to be configured as a counter or used in combination with a logic unit/switches to produce the identification code as claimed.

Akama et al. US 6,601,940 discloses utilizing block enable address terminals in an inkjet printhead ID circuit. A counter is not taught to be part of the ID circuit.

Art Unit: 2853

Hu et al. US 6,719,397 discloses a programmable inkjet ID circuit wherein fuses in both the power and ground lines are programmed. A counter is not taught to be part of the ID circuit.

Hamazawa JP 2000-158664 discloses an ID circuit for an inkjet printhead that employs counters. However the counters are not taught to be responsive to a clock signal line and reset signal line but are instead used to count spitting from nozzles and no logic unit/switches and programming unit or programming of a logic unit as found in combination as claimed by applicant is found in Hamazawa.

REASONS FOR ALLOWANCE

The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for the indication of the allowability of claims 1-7 is the inclusion therein, in combination as currently claimed, of the limitation of the counter of the inkjet print head identification circuit in combination with the logic unit and programmable unit as claimed. This limitation is found in claims 1-7 and is neither disclosed nor taught by the prior art of record, alone or in combination.

The primary reason for the indication of the allowability of claims 8-13 is the inclusion therein, in combination as currently claimed, of the limitation of the counter of the inkjet print head identification circuit in combination with the plurality of switches and programmable unit as claimed. This limitation is found in claims 8-13 and is neither disclosed nor taught by the prior art of record, alone or in combination.

Art Unit: 2853

The primary reason for the indication of the allowability of claims 14-17 is the inclusion therein, in combination as currently claimed, of programming a logic unit according to an identification code that represents the type of the ink jet print head and the count value, so that the ink jet printhead sequentially outputs the identification code, wherein the count value is responsive to the reset signal and the at least one clock signal as claimed. This limitation is found in claims 14-17 and is neither disclosed nor taught by the prior art of record, alone or in combination.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Blaise Mouttet who may be reached at telephone number (571) 272-2150. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 5:00 p.m.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier, Art Unit 2853, can be reached at (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 2853

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Blaise Mouttet October 21, 2004

Blaise Mouttet 10/21/2004


LAMSON NGUYEN
PRIMARY EXAMINER
10/27/04